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208 235-5600 Business

June 8, 2018

Arthur Burbank
Remedial Project Manager
Forest Service Intermountain Region
4350 South Cliffs Drive
Pocatello, ID 83204

Subject: **Smoky Canyon Mine Remedial Investigation/Feasibility Study**
Responses to Agency Comments (April 2018) on
Simplot November 2017 Responses to Comments (September 2017)
Revised Draft FS Technical Memorandum #1:
Development and Screening of Remedial Alternatives

Dear Art,

This submittal by the J.R. Simplot Company provides Simplot Responses to Agency Comments (April 12, 2018) with the attached ARARs/TBCs tables on Simplot November 16, 2017 Responses to Comments (September 8, 2017) on the *Revised Draft Feasibility Study Technical Memorandum #1: Development and Screening of Remedial Alternatives* (FSTM#1) for the Smoky Canyon Mine Remedial Investigation/Feasibility Study (RI/FS).

Please contact me if you have any questions.

Sincerely,

Jeffrey Hamilton
Environmental Engineer

Enclosures

cc (1 copy except as otherwise noted):

Arthur Burbank – USFS, 410 East Hooper, Soda Springs, ID 83276 (1 unbound copy)

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Responses to Agency Comments (April 2018) on Simplot November 2017 Responses to Comments (September 2017) Revised Draft FS Technical Memorandum #1 (March 2017)

General Comments

GC-1 The ARARs need to be more specific. For example, citing the Clean Water Act (CWA) and then mentioning that some undefined parts will be ARARs is vague. Likewise, citing the Resource Conservation and Recovery Act (RCRA) then stating it "sets criteria for hazardous waste management" is not informative. This comment applies to the citations to the Migratory Bird Treaty Act, the ESA, the Mineral Leasing Act, etc. The text should be state which aspects of these statutes are ARARs. For example, include a discussion in the comments about how the Endangered Species Act (ESA) may apply at Smoky Canyon Mine. Are there any endangered or threatened species? Which ones and if there are, will Simplot need to work with USFWS or NMFS to insure compliance? As an example, a discussion of Section 404 of the Clean Water Act is attached.

Response: Additional detail has been provided, as shown in the attached tables.

GC-2 The Agencies do not support Simplot's proposal to establish vegetation preliminary remediation goals (PRGs) for the Smoky Canyon Mine Feasibility Study. The Agencies recognize that there are no CERCLA rules/guidance that precludes using biotic tissue concentrations as PRGs. However, remedial actions at a site are performed on abiotic media, like soil or groundwater in order to address the source of the contamination. The Agencies feel that pursuit of a soil PRG is a component of an implementable, defensible and effective approach for address[ing] the source of the contaminants at the mine.

Response: Simplot will develop soil PRGs for review by the agencies.

Specific Comments

SC-1 **Table 3-1, ARARs, page 1 of 3, Water Quality Standards vs. Clean Water Act:** Be consistent with terms. The second column title "Standard, Limitation, or Requirement Criteria" does not make sense. It seems confusing as to what should go in that column -- the title of the act or the title of the section of the Act which applies. See example.

Response: The proposed revision to the ARARs table is attached. The ARARs table has been revised for consistency of terms.

SC-2 **Table 3-1, ARARs, page 1 of 3:** The second citation to the CWA in the Action-Specific ARARs is unclear. What section is being cited -- 404, 303, or 401? The citation to 303(d)

may be wrong (it appears to be copied and pasted). Also, the comments on that ARAR are wrong. Substantive requirements of ARARs are not "considered," they are required. This citation should also be split up into three ARARs. Sections 401, 402, and 404 should be listed as separate ARARs.

Response: The proposed revision to the ARARs table is attached.

SC-3 **Table 3-1, ARARs, page 1 of 3:** Why are the four citations to the CWA under "Action Specific ARARs" split up?

Response: The proposed revision to the ARARs table is attached.

SC-4 **Table 3-1, ARARs, page 1 of 3:** The Bevill amendment is not an ARAR; it is an exemption to regulation for mining waste. It is not necessary to list in an ARARs table.

Response: The Bevill amendment has been removed from the ARARs table.

Table 3-1
Applicable or Relevant and Appropriate Requirements (ARARs)

Type of ARAR	Statute, Regulation, Standard, or Requirement	Citation or Reference	General Description	Site-Specific Comments	Determination
Federal					
Chemical-Specific	National Primary Drinking Water Regulations (NPDWR)	40 C.F.R. Part 141	Establishes primary drinking water regulations pursuant to Section 1412 of the Public Health Service Act, as amended by the Safe Drinking Water Act and related regulations for public water systems. Subpart F Section 141.51 lists maximum contaminant level goals (MCLGs) for inorganic contaminants. Subpart G Section 141.62 lists maximum contaminant levels (MCLs) for inorganic contaminants.	Hydrogeologic investigations for the RI at Smoky Canyon Mine show that the Thaynes-Dinwoody Formation and Wells Formation produce water. Groundwater from the Culinary Well is used as a private drinking water supply at the Smoky Canyon MIne. Primary drinking water regulations are applicable if groundwater beneath the Site will be used to supply public water systems.	Applicable
	Water Quality Standards	CWA Section 304 33 U.S.C. § 1314(a) 40 C.F.R. Part 131	Section 304 of the federal Clean Water Act (33 U.S.C § 1314) requires that individual states establish water quality standards for surface waters. The implementing regulation establishes the Ambient Water Quality Criteria (AWQC), which are the requirements for state water quality standards that are protective of human health and aquatic life. The standards incorporate designated uses for specific water bodies.	The State of Idaho has adopted the federal water quality criteria. Where numeric state water quality standards have not been promulgated, federal numeric water quality standards are applicable.	Applicable
	Resource Conservation and Recovery Act (RCRA)	40 C.F.R. §§ 261.20 to 261.24	Under RCRA, solid wastes that exhibit certain characteristics are subject to regulation as hazardous wastes. A solid waste is identified as hazardous if it exhibits the characteristic of ignitability, corrosivity, reactivity, or toxicity. Using the toxicity characteristic leaching procedure (Test Method 1311), if extract from the solid waste contains any of the contaminants at concentrations greater than or equal to those listed in Section 260.24, then the solid waste exhibits the characteristic of toxicity and is identified as a hazardous waste.	Potentially applicable if solid wastes are generated as part of the selected remedy. If the selected remedy includes a water treatment system, water treatment residual material or sludge will be tested to determine if the material exhibits the characteristic of toxicity and is hazardous under RCRA to determine proper disposal.	Applicable
	National Pollutant Discharge Elimination System (NPDES)	CWA Section 402 33 U.S.C 1342 40 C.F.R. §§ 122 to 125	Permitting requirements for the discharge of pollutants from any point source. USEPA considers discharges from waste dumps or overburden disposal areas (ODAs) (e.g., springs and seeps at the base of the dumps) as point sources. The NPDES regulations establish requirements for point source discharges and stormwater runoff.	NPDES regulations are potentially applicable for any point source discharge of contaminated water or stormwater runoff at the Smoky Canyon Mine, and management of stormwater runoff during construction where the construction site is 1 acre or more in size. Best Management Practices (BMPs) will be used to manage stormwater runoff during construction of the remedy.	Applicable
Action-Specific	Clean Water Act (CWA)	CWA Section 301(b) CWA Section 402 40 C.F.R. § 125.3	Sections 301(b) and 402 of the Clean Water Act establish criteria and standards for technology-based treatment requirements, including the application of EPA promulgated effluent limitations. The effluent limitations require the best treatment and control technology prior to discharge.	The Hoopes Water Treatment Plant (WTP) pilot study at the Smoky Canyon Mine currently discharges to Hoopes Spring. Technology-based treatment requirements are applicable if the final remedy involves water treatment and discharge. Best treatment and control technology will be developed as part of the FS process and implemented during remedial design.	Applicable
		CWA Section 303(d) 33 U.S.C. §1251 et seq. 40 C.F.R. § 130.7	Under Section 303(d) of the Clean Water Act, states, territories and authorized tribes are required to submit lists of impaired waters. These are waters not meeting applicable water quality standards for one or more beneficial uses by one or more pollutants. The law requires that the states develop EPA approved Total Maximum Daily Loads (TMDL) for those Category 5 waters found on the 303(d) list.	The Salt River subbasin waterbodies on the 303(d) list have a medium priority for TMDL development. Streams near the Smoky Canyon Mine listed on the 2014 303(d) list include the following: Smoky Creek, Roberts Creek, Crow Creek, Tygee Creek, North Fork Sage Creek, Sage Creek, Pole Canyon, and South Fork Sage Creek. Those stream segments listed specifically for selenium include: Crow Creek (Deer Creek to border), North Fork Sage Creek, Pole Canyon Creek, South Fork Sage Creek, Sage Creek (confluence with North Fork Sage Creek to mouth). Those 303(d) waterbodies listed for selenium will be assessed for applicability of ARARs and considered in the selection of the remedial alternative.	Applicable
		CWA Section 401 13 U.S.C. § 1341 40 C.F.R. § 124.53	Under Section 401 of the Clean Water Act, a federal agency cannot issue a permit (e.g., Section 402 NPDES permit, or Section 404 permit for discharge of dredged or fill material) or license for an activity that may result in a discharge to waters of the U.S. until the state where the discharge would originate has granted or waived the Section 401 certification. The Section 401 certification can be an effective tool for protecting water quality.	Potentially applicable for remedial actions that result in a point source discharge (i.e., discharge from a water treatment system) or discharge of dredged and fill material (e.g., road building, construction of a cover system, or other activities that cross or impact stream channels) that requires a permit. Simplot would be required to submit a Section 401 certification with the federal permit application.	Applicable
		CWA Section 402 13 U.S.C. § 1342 40 C.F.R. Parts 122 to 124	The NPDES program under Section 402 of the Clean Water Act establishes a comprehensive framework for addressing waste water and storm water discharges, and requires that point-source discharges not cause the exceedence of surface water quality standards outside the mixing zone. The NPDES program requires permits for the discharge of pollutants from any point source into waters of the U.S. Section 122.26 specifies requirements for point source discharge of storm water from construction sites to surface water and provides for Best Management Practices (BMPs) such as erosion control for removal and management of sediment to prevent run-on and runoff.	A water treatment system and/or storm water conveyance systems such as run-on/runoff control ditches or detention basins may be constructed as part of the final remedy. Potentially applicable if the remedy creates a point source discharge (i.e., from a water treatment system) or for storm water management during construction or for any storm water conveyance systems constructed at the Smoky Canyon Mine. A Section 402 NPDES permit would be required for any such discharge.	Applicable
		CWA Section 404 33 U.S.C. §1344 40 C.F.R. Part 230	Section 404 of the Clean Water Act establishes a program to regulate the discharge of dredged and fill material into waters of the U.S. including wetlands. Section 404 requires a permit before dredged or fill material may be discharged. No discharge of dredged or fill material may be permitted if a practicable alternative exists that is less damaging to the aquatic environment, or the waters would be significantly degraded.	A Section 404 permit for discharges of dredged or fill material to wetlands is required for remedial actions that may result in a discharge to surface water (e.g., road building, construction of a cover system, or other activities that cross or impact stream channels). The design of the final remedy will be developed to minimize or avoid impacts. Compensatory mitigation for unavoidable loss of aquatic habitat and/or wetlands will be developed during remedial design and constructed during implementation of the remedy.	Applicable
	Resource Conservation and Recovery Act (RCRA)	42 U.S.C. § 6901 et seq. 40 C.F.R. Parts 260 to 265 and 268	Subtitle C of RCRA addresses requirements for hazardous waste from the point of generation to disposal. Any solid waste that exhibits a characteristic of hazardous waste or falls under a category of listed hazardous waste must be managed under these requirements. The requirements apply to transportation, treatment, storage, or disposal of the hazardous waste.	Potentially applicable if solid wastes are generated as part of the selected remedy. For example, if the selected remedy includes a water treatment system, water treatment residual material or sludge will be tested to determine if the material is hazardous prior to transport or disposal.	Applicable

Table 3-1
Applicable or Relevant and Appropriate Requirements (ARARs)

Type of ARAR	Statute, Regulation, Standard, or Requirement	Citation or Reference	General Description	Site-Specific Comments	Determination
Action-Specific	Mineral Leasing Act (MLA)	30 USC § 181 et seq. 43 CFR Parts 3500 and 3590	Regulates discovery, mining, processing and reclamation on federal phosphate leases. Section 3592.1 establishes requirements for operating plans that detail exploration and mining operations. The plans must be responsive to the lease requirements for the protection of nonmineral resources and for reclamation of the surface of the lands affected by the operations.	Provisions regarding reclamation are potentially applicable. For affected areas that require revegetation (e.g., covers on overburden disposal areas), the plan will include the proposed methods of preparation and fertilizing of the soil prior to replanting, the types and mixtures of grasses to be planted, and the methods of planting including the amount of grasses per acre.	Applicable
	Surface Mining Control and Reclamation Act (SMCRA)	30 U.S.C §§ 1201–1326 30 C.F.R. Part 816.43, 45–47, 111 30 C.F.R Part 784	The SMCRA establishes permanent program performance standards for surface mining operations. The SMCRA also establishes minimum requirements for coal mining operations and reclamation of mined areas to protect society and the environment.	These requirements are not applicable because the Smoky Canyon Mine is not a coal mine. The requirements may be relevant and appropriate to the design of a cover and runoff and run-on control system as part of the final remedy.	Relevant and Appropriate
	Clean Air Act (CAA)	40 C.F.R. Part 50 40 C.F.R § 52.670	Establishes National primary and secondary ambient air quality standards under Section 109 of the CAA to protect the public health and welfare.	Federal standards for particulate matter (PM) may be relevant and appropriate if dust is generated during construction of the remedy.	Relevant and Appropriate
	National Emissions Standards for Hazardous Air Pollutants (NESHAP)	40 C.F.R Part 61	Establishes numerical emission limits under the CAA for hazardous air pollutants and other substances that cause serious health effects emitted from stationary sources. In addition to complying with the provisions of this part, the owner or operator of a stationary source may be required to obtain an air pollution control permit.	The State of Idaho's air quality standards govern air quality at the Smoky Canyon Mine; therefore, NESHAP requirements are not applicable but may be relevant and appropriate for stationary sources of air pollution.	Relevant and Appropriate
	Migratory Bird Treaty Act (MBTA)	16 U.S.C. § 703 et seq.	Prohibits pusuing, hunting, taking, capturing, killing, or possessing migratory birds and migratory game birds. The provision incudes any part, nest, or egg of any such bird, or any product composed of any such bird.	Several species of birds including raptors, upland gamebirds, passerines, waterfowl, and shorebirds nest in the area in aspen or conifer stands, sagebrush and grassland habitat, and in riparian habitat along some of the creeks at the mine. Remedial actions will be designed and implemented to avoid harm to migratory birds, their nests, or eggs. Construction schedules will be planned to avoid conflicts with migratory bird activities.	Applicable
	Fish and Wildlife Coordination Act	50 C.F.R. §10.12	Under the Fish and Wildlife Coordination Act, federal agencies involved in actions that will result in the control or structural modification of any natural stream or body of water for any purpose, are required to take action to protect the fish and wildlife resources that may be affected by the action.	Perennial streams within and adjacent to the mine contain several species of fish. The mainstem of Crow Creek has the most diverse fish species assemblages, while Sage Creek has the highest trout biomass. Potentially applicable if remedial action affects any of the natural creeks and streams at the mine or damages any of the fish habitat. Remedial actions will be designed to protect fish and fish habitat.	Applicable
	Endangered Species Act (ESA)	7 U.S.C. 136 16 U.S.C. 460 16 U.S.C. § 1531 et seq. 50 C.F.R. Part 402 40 C.F.R. § 6.302	Federal Agencies are prohibited from jeopardizing threatened and endangered species or adversely modifying habitats essential to their survival. Substantive requirements include prohibition against taking an endangered or threatened species and consultation with theU.S. Fish and Wildlife Service (USFWS) if any threatened or endangered species are present.	May be applicable if remedial action activities jeopardize threatened or endangered species or adversely modify their habitat. The only federally-listed threatened and endangered species in Caribou County is the Canada lynx (*Lynx canadensis*) (FWS 2013). Although potential "linkage" habitat for the lynx is present (Ruediger et al. 2000; USFS 2007), surveys for lynx indicate that this species is not present in the Smoky Canyon Mine area (Maxim 2002, 2004; BLM and USFS 2007). If lynx are observed in the vicinity of the mine during implementation of the final remedy, then the USFWS will be consulted.	Applicable
	Bald and Golden Eagle Protection Act	16 U.S.C. § 668 et seq. 50 C.F.R. 22	Prohibits any person from knowingly, or with wanton disregard, selling, offering to sell, taking, purchasing, transferring, bartering, exporting, importing, or possessing or harming a bald or golden eagle, or any part, nest, or egg thereof without obtaining a permit.	Bald eagles and golden eagles may use the Smoky Canyon Mine area for hunting and/or nesting. These raptors may be expected to nest in aspen or conifer stands in the mid- to higher elevation areas and north and west aspects that receive sufficient moisture to support aspen and conifer stands. Remedial actions will be designed and implemented to avoid harm to bald and golden eagles, their nests, or eggs.	Applicable
Location-Specific	National Historic Preservation Act (NHPA)	54 U.S.C. § 300101 et seq. 36 C.F.R. Parts 60, 63, and 800	The NHPA requires federally funded projects to identify and mitigate impacts of project activities on properties listed on or eligible for listing on the National Register. Section 106 of the NHPA requires that the historic preservation review process balances needs of federal undertaking with effects the undertaking may have on historic properties.	An archaeological team surveyed all areas that might be affected by mining activities at Smoky Canyon (USFS and USGS 1981). A few historic artifacts were found and two sawmills were located in the vicinity of project areas. There are four known historic sites near the lease area (Lander Trail, Crow Creek Wagon Road, Fairview Cutoff, and Oneida Salt Works). Potentially applicable if additional historic sites are found in areas to be disturbed by remedial actions. Impacts of remedial actions will be mitigated in accordance with the NHPA.	Applicable
	Archaeological Resources Protection Act (ARPA)	43 C.F.R. Part 7	Establishes procedures to provide protection for archaeological resources located on public lands. Prohibits any person from excavation, removing, damaging, or otherwise altering or defacing any archaeological resource.	Archaeological resources were investigated for all areas potentially affected by proposed mining activities for the original Environmental Impact Statement (EIS) (USFS and USGS 1981), and an archaeological survey of the borrow areas was conducted in 2017. No archaeological resources were found at the Smoky Canyon Mine. Potentially applicable if archeological resources are found in areas to be disturbed by remedial actions. If archaeological resources are identified during construction of the final remedy, the resources will be protected.	Applicable
	Native American Graves Protection and Repatriation Act (NAGPRA)	25 U.S.C. §§ 3001 to 3013 43 C.F.R. 10	Requires federal agencies and institutions that receive federal funding to return Native American cultural items to lineal descendants and culturally affiliated Indian tribes. It also establishes procedures for the inadvertent discovery or planned excavation of Native American cultural items on federal or tribal lands. These regulations apply to human remains, funerary objects, sacred objects, or objects of cultural patrimony that are indigeous to the continental United States.	Archaeological and historical resources were investigated for all areas potentially affected by proposed mining activities for the EIS (USFS and USGS 1981). The Smoky Canyon MIne area is largely free of cultural resources. Potentially relevant and appropriate if cultural items are identified in USFS lease areas during construction of the final remedy. Any cultural items found will be returned to the tribes.	Relevant and appropriate

Table 3-1
Applicable or Relevant and Appropriate Requirements (ARARs)

Type of ARAR	Statute, Regulation, Standard, or Requirement	Citation or Reference	General Description	Site-Specific Comments	Determination
Location-Specific	Protection of Wetlands	40 C.F.R. § 6.302 40 C.F.R. 6 Appendix A	Wetlands Protection: Executive Order 11990 requires agencies conducting certain activities to avoid, to the extent possible, the adverse impacts associated with the destruction or loss of wetlands and to avoid support of new construction in wetlands if a practicable alternative exists.	Riparian areas occur along the creeks and streams at the mine and in the vicinity of Hoopes Spring and South Fork Sage Creek Springs. Vegetation in riparian areas is dominated by willows, sedges, and reedgrass. The wetlands protection order may be applicable if remedial actions are planned in areas that contain wetlands and the construction activities planned will impact the wetlands. Compensatory mitigation for loss of wetlands will be developed during remedial design and implemented during construction of the final remedy.	Applicable
	National Forest Management Act	16 U.S.C. §§ 1601 to 1614 36 C.F.R. 219	The Caribou-Targhee Land Use Management Plan establishes multiple use goals and objectives, forest-wide management requirements, and monitoring and evaluation requirements. Establishes direction so that future decisions affecting the Forest will include an interdisciplinary approach to achieve integrated consideration of physical, biological, economic and other sciences.	The management plan provides requirements to maintain and restore National Forest System land and water ecosystems under multiple uses. Requirements of the plan are applicable for any remedial actions.	Applicable
	2003 Revised Forest Plan Caribou National Forest 1997 Revised Forest Plan Targhee National Forest	USFS (2003) USFS (1997)	Provides guidance for all natural resource management activities and establishes management standards within the Caribou-Targhee National Forest in order to sustain watersheds, forests, and rangelands and provide for multiple uses of these lands.	The Smoky Canyon Mine is on National Forest System land in the Caribou-Targhee National Forest and is operated under a Special Use Permit and BLM phosphate leases. Remedial action must take into account the requirements of the Caribou and Targhee Forest Plans.	Applicable
	Federal Land Policy and Management Act of 1976 (FLPMA)	43 U.S.C. §§1701 to 1785	Public lands and their resources are periodically and systematically inventoried and their present and future use is projected through a land use planning process, and the land will be managed for use and protection of the land and its natural resources.	Provisions regarding undue degradation are potentially applicable to actions conducted on the portion of the Smoky Canyon Mine that is public lands.	Applicable
State of Idaho					
Chemical-Specific	Idaho Water Quality Standards	IDAPA 58.01.02	Idaho water quality standards and wastewater treatment requirements include but are not limited to the following: Administrative policy for protection of waters of the State (.050.02); Antidegradation policy (.051); Mixing zone policy (.060); Violation of water quality standards (.080); Analytical procedures (.090); Surface water use designations and nondesignated surface waters (.100 to .101); Designations of surface waters found within Salmon Basin (.130); General surface water quality criteria (.200); Surface water quality criteria for aquatic life, recreation, water supply, wildlife and aesthetics use designations (.250 to .253); Variances from water quality standards (.260); and Site-specific surface water quality criteria (.275).	The State of Idaho standards and requirements are applicable to surface water bodies at the Site or surface water impacted by the selected remedy.	Applicable
	Public Drinking Water Systems Rules	IDAPA 58.01.08	Controls and regulates the design, construction, operation, maintenance, and quality control of public drinking water systems to provide a degree of assurance that such systems are protected from contamination and maintained free from contaminants which may injure the health of the consumer.	Hydrogeologic investigations for the RI at Smoky Canyon Mine show that the Thaynes-Dinwoody Formation and Wells Formation produce water. Primary drinking water regulations are applicable if the potential exists for construction of a public drinking water system in the future.	Applicable
	Idaho Ground Water Quality Rule	IDAPA 58.01.11	The Idaho Ground Water Quality Rule (GWQR) establishes minimum requirements for protection of groundwater quality through numerical standards and an aquifer categorization process. The rule addresses protection of groundwater quality, maintaining existing and projected future beneficial uses, categorization of groundwater, establishing groundwater quality standards, and preventing groundwater contamination while allowing for mineral extraction. Section 200 establishes numerical groundwater quality standards. Section 401 describes the process for setting a point of compliance (POC) at which the mine operator must meet the groundwater standards.	State numerical groundwater quality standards are applicable to groundwater at the Site. Groundwater is currently monitored and compared to these standards. Following completion of the remedial actions, a POC may be set in accordance with Section 401 of Idaho's GWQR. Simplot will submit an application to establish a monitored outer boundary where groundwater resources must comply with Idaho's GWQR and will propose monitoring wells as POC and indicator wells. DEQ may determine that additional POC wells are necessary to ensure that there is no injury to current or projected future beneficial uses of groundwater or violation of surface water standards.	Applicable
	Rules and Standards for Hazardous Waste	IDAPA 58.01.05	Rules adopted pursuant to the Hazardous Waste Management Act (HWMA) establish methods for the identification and listing of hazardous waste, and standards applicable to generators, transporters, and owners and operators of treatment, storage, and disposal facilities.	Numerical standards are potentially applicable to wastes generated by remedial action at the Site. If the selected remedy includes a water treatment system, water treatment residual material or sludge will be tested to determine if the material is hazardous prior to transport or disposal.	Applicable
	Idaho Hazardous Substance Emergency Response Act	Idaho Code §§ 39-7101 to 7115	Facilitates emergency response planning and requires expedient response and/or containment for hazardous substance release in order to protect the health, safety, and welfare of the people of Idaho.	Potentially relevant and appropriate during remedial action construction if there is a release of a hazardous substance.	Relevant and Appropriate

Table 3-1
Applicable or Relevant and Appropriate Requirements (ARARs)

Type of ARAR	Statute, Regulation, Standard, or Requirement	Citation or Reference	General Description	Site-Specific Comments	Determination
Action-Specific	Solid Waste Management Rules	IDAPA 58.01.06	Establishes requirements for operation and closure of solid waste and solid waste management facilities. Solid Waste Management Rules and programs administered under the rules are adopted to protect air quality, surface water quality, and groundwater quality.	The Solid Waste Management Rules do not apply to overburden, waste dumps, stockpiles, tailings and other materials associated with phosphate mining (see IDAPA 58.01.06.001.03(b)(iv)). Potentially relevant and appropriate if solid waste management units are constructed as part of the remedy or solid waste is generated during the remdial action.	Relevant and Appropriate
	Idaho Surface Mining Act	Idaho Code Title 47, Chapter 15	The Surface Mining Act requires reclamation of the surface of all lands disturbed by mining operations in order to protect public health and wildlife. Section 47-1509 includes procedures for reclamation (i.e., for leveling overburden piles, controlling erosion, preventing surface runoff, abandoning roads, revegetating overburden piles, and reclaiming tailings ponds). Section 47-1510 requires planting of vegetation comparable to the vegetation growing before mining is required on mined areas.	The final remedy for the mine may include construction of cover systems, abandonment of roads, construction of run-on and runoff controls, and planting of vegetation. Procedures listed in Section 47-1509 should be considered in the selection of reclamation techniques for overburden piles, tailings ponds, haul roads, etc. Seed mixtures for revegetation efforts will be comparable to pre-mining vegetation as described in Section 47-1510.	Relevant and Appropriate
	Rules for Exploration and Surface Mining	IDAPA 20.03.02	Rules pursuant to the Idaho Surface Mining Act to reclaim the surface of lands and thereby conserve natural resources, protect wildlife and aquatic resources, and reduce soil erosion. Section 20.03.02-140 includes BMPs and reclamation for surface mining operations.	BMPs (e.g., nonoint source sediment controls, clearing and grubbing, overburden/topsoil, backfilling and grading, and abandonment of tailings impoundments) and reclamation procedures should be considered in the selection of reclamation techniques for pits, overburden areas, and the tailings impoundments.	Relevant and Appropriate
	Well Construction Standards Rules	IDAPA 37.03.09	Describes requirements for well construction and abandonment. Rule 25 pertains to construction of cold water wells. Monitoring and remediation wells must be constructed and maintained in a manner that prevents waste or contamination. Rules state that when a monitoring well is no longer useful or needed, it must be decommissioned in accordance with Rule 25 Subsection 025.16.	There are 24 active groundwater monitoring wells at the Site. Some of these wells may be targeted for abandonment or new wells may be installed as part of the remedial action. Well construction/abandonment procedures must be followed and materials prescribed under Rule 25 must be used during construction or abandonment of groundwater monitoring wells.	Applicable
	Rules for the Control of Air Pollution in Idaho (Rules for Control of Fugitive Dust)	IDAPA 58.01.01	These rules provide for the control of air pollution in Idaho. Rules 650 to 651 require that precautions be taken to prevent the generation of fugitive dust.	Potentially relevant and appropriate if remedial actions generate fugitive dust. Precautions appropriate to construction for remedial actions may include the use of water or chemicals, the application of dust suppressants, and/or covering of dump trucks used for hauling soils.	Relevant and Appropriate
	Stream Channel Alteration Rules	IDAPA 37.03.07	State of Idaho rules for alteration of stream channels that include minimum standards for construction to prevent alterations that will be a hazard to a stream channel and its environment. Requires a joint permit with the Idaho Department of Water Resources (IDWR), Idaho Department of Lands (IDL), and the US Army Corps of Engineers (USACE) under the Stream Protection Act.	The final remedy will be designed to minimize or avoid impacts to stream channels. For areas where construction does alter, modify, relocate, or change the natural existing shape of the channel or change the direction of flow of water in the stream channel, minimum standards for construction (e.g., construction procedures, temporary structures, dumped rock riprap, culverts, etc.) shall apply. Potentially applicable to prevent alterations that will be a hazard to a stream channel and its environment during remedial actions.	Applicable
	Idaho Classification and Protection of Wildlife Rule	IDAPA 13.01.06	Rules establish the classification and protection of wildlife including big game animals, upland game animals, game birds, game fish, fur-bearing animals, threatened or endangeered species, protected nongame species, and predatory wildlife. State of Idaho law prohibits taking or possessing protected nongame and threatened or endangered species. Game species may be taken in accordance with Idaho law and rules established by the Idaho Fish and Game Commission. Idaho law and rules are enforced by the Idaho Department of gAme and Fish (IDGF). WIldlife species classified as unprotected and predatory may be taken in any amount at any time.	Big game animals (deer, elk, black bear, mountain lion), migratory game birds (duck, goose, dove), upland birds (partridge, grouse), upland game/furbearers (rabbit, marten, mink, weasel, red fox, skunk, badger, bobcat, coyote), and game fish (trout, whitefish) are present in and around the mine and may be taken in accordance with hunting and fishing rules established by IDGF. Protected nongame fish (blue-head sucker) and any threatened or endangered species (lynx) may not be harvested or possessed. Monitoring programs for wildlife currently conducted at the Smoky Canyon Mine in conjunction with the IDFG deal with big game special-use areas and sage grouse leks. Remedial action must be designed and implemented to comply with these rules to protect wildlife and threatened or endangered species.	Applicable
	Protection of Animals and Birds	Idaho Code Title 36, Chapter 11	Idaho law prohibits taking of wildlife, birds or fur-bearing animals and declares exceptions. For the protection of animals and birds, it is unlawful to hunt from motorized vehicles or aircraft or hunt using artificial light. Property owners have the right to control, trap, or remove any wild animal damaging private property.	Remedial action must be designed and implemented to comply with these rules with restrictions on the taking of wildlife, protection of wildlife, and control of predators.	Applicable
Location-Specific	Preservation of Historical Sites	Idaho Statutes Title 67, Chapters 46 and 41	Authorization to preserve historical, archeological, architectural, and cultural heritage. Provides for designation as historic property if property meets criteria established for inclusion in the national register of historic places. Historic property is any building, sgtructure, area, or site that is significant in the history, architecture, archaeology, or culture of the State of Idaho.	An archaeological team surveyed all areas that might be affected by mining activities at Smoky Canyon (USFS and USGS 1981). A few historic artifacts were found and two sawmills were located in the vicinity of project areas. There are four known historic sites near the lease area (Lander Trail, Crow Creek Wagon Road, Fairview Cutoff, and Oneida Salt Works). Potentially applicable if additional historic sites are found in areas to be disturbed by remedial actions (i.e., borrow areas).	Applicable
	Fences in General	Idaho Code Title 35, Chapter 1	Provides specifications for lawful fences in the State of Idaho and requirements for erection of partition fences, care of fences, and establishment of gates. Fences must be not less than 4-1/2 feet high and the bottom board, rail, pole, or wire must not be more than 20 inches above the ground.	Fences are currently in place in lower South Fork Sage Creek to prevent grazing by livestock and wildlife. Potentially applicable if fencing is required as part of the selected remedy. Fences installed for the remedy would have to meet state specifications.	Applicable
	Stream Channel Alteration Rules	IDAPA 37.03.07	State of Idaho rules for alteration of stream channels that include minimum standards for construction to prevent alterations that will be a hazard to a stream channel and its environment. Requires a joint permit with the Idaho Department of Water Resources (IDWR), Idaho Department of Lands (IDL), and the US Army Corps of Engineers (USACE) under the Stream Protection Act.	The design of the final remedy will be developed to minimize or avoid impacts to stream channels. For areas where construction does alter the natural existing shape of the channel or change the direction of flow of water in the stream channel, minimum standards for construction (e.g., construction procedures, temporary structures, dumped rock riprap, culverts, etc.) shall apply. Potentially applicable to prevent alterations that will be a hazard to a stream channel and its environment.	defer to Action-specific ARAR

Table 3-2
Criteria or Guidance To Be Considered (TBCs)

Type of TBC	Statute, Regulation, Standard, or Requirement	Citation or Reference	Description	Site-Specific Comments	Determination
Federal					
Chemical-Specific	National Secondary Drinking Water Regulations	42 U.S.C 300g-1 40 C.F.R. Part 143	Establishes secondary drinking water regulations (secondary MCLs) pursuant to Section 1412 of the Safe Drinking Water Act, as amended. These regulations control contaminants in drinking water that primarily affect the aesthetic qualities relating to public acceptance of drinking water. At considerably higher concentrations of these contaminants, health implifications may exist as well as aesthetic degradation. The regulations are not Federally enforceable but are intended as guidelines for public water systems.	Hydrogeologic investigations for the RI at Smoky Canyon Mine show that the Thaynes-Dinwoody Formation and Wells Formation produce water. Groundwater from the Culinary Well is used as a private drinking water supply at the mIne. Secondary drinking water regulations are to be considered if groundwater beneath the Site will be used to supply public water systems.	TBC
	USEPA Regional Screening Levels (RSLs)	USEPA (2018) [1]	USEPA establishes acceptable risk levels for individual contaminants to protect human health drinking water uses at the 1 x 10^{-6} level for individual carcinogens or a hazard quotient (HQ) of 1 for non-carcinogens. The RSLs are risk-based concentrations derived from standardized equations combining expsoure information assumtions with USEPA toxicity data.	RSLs are to be considered if groundwater or surface water is used as drinking water. These standards are only for contaminants for which there are no maximum contaminant level goals (MCLGs) or maximum contaminant levels (MCLs) are established.	TBC
	Sediment Qualtiy Assessment Guidelines (SQAGS)	McDonald et al. (2003) [2]	Sediment quality assessment guidelines (SQAGS) are numerical guidelines for assessing the potential for adverse biological effects associated with exposure to contaminated sediments. Both threshold effect concentrations (TEC) and probable effect concentrations (PEC) are included in the guidelines. SQAGS are used to conduct sediment quality assessments and to support defensible sediment management decisions.	The Site Specific Ecological Risk Assessment (SSERA) for the Smoky Canyon Mine used the SQAGS threshold effect concentration values as initital risk screening values for sediment concentrations at the Site. In the end, the SSERA stated that any risk conclusions for selenium in aquatic environments should be made based on concentrations in fish tissues. If sediment in streams or other aquatic habitats at the mine is impacted by remedial actions, then the SQAGS are to be considered.	TBC
	NOAA Freshwater Sediment Benchmarks	NOAA (2008) [3]	The NOAA Screening Quick Reference Tables (SQuiRTs) are screening concentrations or benchmarks for freshwater sediments. The benchmarks are for preliminary screening purposes and do not constitute clean-up levels.	NOAA SQuiRT concentration values were used in the SSERA for the Smoky Canyon Mine as secondary risk screening values for sediment concentrations. The values for selenium are conservative. In the end, the SSERA stated that any risk conclusions for selenium in aquatic environments should be made based on concentrations in fish tissues. If sediment in streams or other aquatic habitats at the mine is impacted by remedial actions, then the SQuiRTS are to be considered.	TBC
	Proposed Selenium Benchmarks for Freshwater Sediment	Lemly (2002) [4] Vanderveer and Canton (1997) [5]	Two different studies (Lemly 2002; Venderveer and Canton 1997) arrived at two different potential protective levels in sediments. Neither is quantitatively derived nor based on effects to benthic macroinvertebrates.	The range of 2 to 4 milligram per kilogram dry weight (mg/kg dw) provides for a screening level for selenium in sediments. These values do not constitute effects thresholds or clean up values. Background should be considered in the context of these values. More specifically, since fish are a more sensitive indicator of effects for selenium in the aquatic environment, tissue concentrations for fish should be considered as the threshold values for effects and potential cleanup.	TBC
Action-Specific	American Indian Religious Freedom Act (AIRFA) Religious Freedom Restoration Act (RFRA)	42 U.S.C. § 1996 et seq. H.R. 4155 42 U.S.C. §§ 2000bb-200bb-4	The AIRFA protects and preserves the traditional religious rights and cultural practices of Native Americans. These rights include access of sacred sites, repatriation of sacred objects held in museums, freedom to worship through ceremonial and traditional rites, and use and possession of objects considered sacred. The Act, as amended, provides for the management of federal lands in a way that does not frustrate the traditional religions and religious purposes of Native Americans. The RFRA protects religious practices that are substantially burdened by governmental actions.	The Shoshone-Bannock Tribes is a federally recognized sovereign nation located on the Fort Hall Reservation in southeast Idaho. The Smoky Canyon Mine and all public lands in the vicinity of the mine may be used for Tribal ceremonial activities consistent with the Shoshone-Bannock Tribe treaty-reserved rights. These rights are to be considered before any remedial actions are implemented at the Site.	TBC
Location-Specific	Considering Wetlands at CERCLA Sites Guidance	OSWER 9280.03 (May 1994)	Provides guidance when considering the potential impacts of remedial actions on wetlands in order to protect wetlands under the substantive requirements of the Floodplain Management Executive Order (EO 11988) and the protection of Wetlands Executive Order (EO 11990).	Riparian areas occur along the creeks and streams at the mine and in the vicinity of Hoopes Spring and South Fork Sage Creek Springs. Vegetation in riparian areas is dominated by willows, sedges, and reedgrass. The wetlands protection order may be applicable if remedial actions are planned in areas that contain wetlands and the construction activities planned will impact the wetlands. Prior to initiating any action that might impact wetlands, mitigation measures such as impact avoidance, impact minimization, and compensatory mitigation should be considered.	TBC
	Bureau of Land Management Record of Decision (ROD) and Approved Pocatello Resource Management Plan (RMP) with amendments	BLM (2012)	RMP ensures that impacted lands will be rehabilitated to accommodate productive, post-mining land uses by establishing multiple use goals and objectives, BLM management and monitoring and evaluation guidelines. Establishes direction so that future decisions affecting BLM managed lands will include an interdisciplinary approach to achieve integrated consideration of physical, biological, economic and other sciences. Provides the direction for how the public lands are to be managed/administered by the Pocatello Field Office.	The Pocatello Field Office RMP provides guidelines for management of reclamation activities to ensure containment and control of selenium and other contaminants. The guidelines provided in the plan are to be considered during remedial actions.	TBC

Table 3-2
Criteria or Guidance To Be Considered (TBCs)

State of Idaho					
Chemical-Specific	Secondary Drinking Water Regulations	IDAPA 58.01.08.400	Section 400 of the Idaho DEQ Rules for Public Drinking Water Systems establishes secondary MCLs (as defined in 40 C.F.R. Part 143) for public water systems. These regulations control contaminants in drinking water that primarily affect the aesthetic qualities relating to public acceptance of drinking water. At considerably higher concentrations of these contaminants, health implifications may exist as well as aesthetic degradation. The regulations are not Federally enforceable but are intended as guidelines for public water systems.	Hydrogeologic investigations for the RI at Smoky Canyon Mine show that the Thaynes-Dinwoody Formation and Wells Formation produce water. Groundwater from the Culinary Well is used as a private drinking water supply at the mIne. Secondary drinking water regulations should be considered if groundwater beneath the Site will be used to supply public water systems.	TBC
Action-Specific	Idaho Nonpoint Source Management Plan	IDAPA 58.01.02.350 IDEQ (2015)	Idaho's Nonpoint Source (NPS) Management Plan, developed as required by USEPA under Section 319 of the Clean Water Act, provides guidance to protect or restore (where possible) the beneficial uses of the State's surface water and groundwater. The plan includes both groundwater and surface water protection programs, which are coordinated and administered by Idaho DEQ. Water quality goals include monitoring and assessing water quality conditions to determine compliance with standards and support of beneficial use.	Surface water and groundwater at Smoky Canyon Mine are monitored to assess water quality conditions and determine compliance with aquatic water qualtiy criteria and groundwater standards. The NPS Management Plan provides guidance to be considered under the various monitoring programs at the mine.	TBC
	Surface Mine and Reclamation Plan Smoky Canyon Project	Idaho Code Title 47, Chapter 15 Simplot (1981)	The Surface Mine and Reclamation Plan provides Simplot's proposal to develop the Smoky Canyon phosphate lease I-012890 as an open pit mine. The plan includes exploration drilling to delineate the ore body within each mine panel, development drilling to be conducted in conjunction with production to resolve structure problems, and a reclamation program to optimize surface mine rehabilitation.	The Surface Mine and Reclamation Plan is to be considered during mining and reclamation activities. The sequence of mine panel development began in accordance with the preferred approach in the mine plan, but has changed over time as the needs of the mine changed. The reclamation plan at the Smoky Canyon Mine is conducted concurrently with development to minimize the amount of disturbed acreage and faciitate reclamation of waste disposal sites and reestablishment of cover and forage.	TBC
	Catalog of Stormwater Best Management Practices for Idaho Cities and Counties	IDEQ (2005)	The catalog provides technical guidance for construction site design and the selection of stormwater BMPs. The objective of stormwater management is to minimize damage to natural resources, minimize the amount of sediment and other contaminants in runoff, and preserve the stability of stream corridors.	Procedures contained in the Catalog of BMPs for Idaho to control erosion and sediment during and after construction are to be considered during implementation of the final remedy.	TBC
Location-Specific	Selenium Area-Wide Investigation Area-Wide Risk Management Plan	IDEQ (2004)	The Area-Wide Investigation (AWI) required IDEQ to develop an Area-Wide Risk Assessment and Risk Management Plan. The Area-Wide Risk Management Plan (AWRMP) provides discretionary guidance to assist in mine-specific risk management under CERCLA. Specific removal action goals, objectives, and action levels presented in the plan were developed to assist in focusing resources, identifying releases and areas of concern, and making decisions.	The Area-Wide removal action goals and objectives In the AWRMP target the protection of surface water, groundwater, wildlife, and multiple beneficial uses in the Southeast Idaho phosphate resource area. These goals and objectives are to be considered in making decisions about site-specific activities at the Smoky Canyon Mine.	TBC

Notes:

1 - U.S. Environmental Protection Agency Regional Screening Levels (RSLs) accessed at https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables

2 - MacDonald, D.D., C.G. Ingersoll, D.E. Smorong, R.A. Lindskoog, G. Sloane, and T. Biernacki. 2003. Development and Evaluation of Numerical Sediment Quality Assessment Guidelines (SQAGs) for Florida Inland Waters. Florida Department of Environmental Protection, Tallahassee, FL.

3 - National Oceanic and Atmospheric Association (NOAA). 2008. Screening Quick Reference Tables (SQuiRTs). NOAA Office of Response and Restoration Division, NOAA OR&R Report 08-1, Seattle, WA. Available at http://response.restoration.noaa.gov/book_shelf/122_NEW-SQuiRTs.pdf.

4 - Lemley, A.D. 2002. Selenium assessment in aquatic ecosystems. A guide for Hazard Evaluation and Water Quality Criteria. Springer-Verlag, New York, NY.

5 - Vanderveer, W.D., and S.P. Canton. 1997. Selenium Sediment Toxicity Thresholds and Derivation of a Water Quality Criteria for Freshwater Biota of Western Streams. Environmental Toxicology and Chemistry. Vol 16, No. 6. 1260-1268.